

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

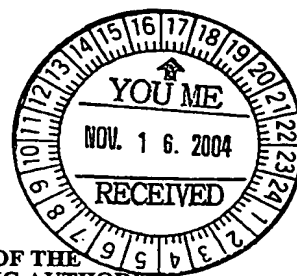
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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)



Date of mailing
(day/month/year) **08 NOVEMBER 2004 (08.11.2004)**

Applicant's or agent's file reference
OPP041891KR

FOR FURTHER ACTION

See paragraph 2 below

International application No.
PCT/KR2004/001861

International filing date (day/month/year)
23 JULY 2004 (23.07.2004)

Priority date(day/month/year)
23 JULY 2003 (23.07.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC7 H04L 12/28

Applicant

KT Corporation et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.
For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/001861

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/KR2004/001861

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 17	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 17	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 17	YES
	Claims		NO

2. Citations and explanations :

1. Reference is made to the following document:

D: KR 01-64740 A (KT Corp.) 11 July 2001

2. The present invention relates to an apparatus and method for broadcasting by a wireless internet repeater, wherein interference between signals having the same frequency is eliminated and a wireless internet service can easily be provided even in a shadow area; also, a signal and data sending/receiving can be completed using a different communication method between a wireless internet repeater and a user's terminal, even in the case of a user's terminal being located in a shadow area.

3. D relates to providing a recording medium wherein a program for a repeater and method capable of detecting a shadow area can be read by a computer. The repeater has the function of detecting a shadow area in a radio communication system, and it includes the first radio frequency processor, a repeater modem unit and the second radio frequency processor. The first radio frequency processor transmits a radio frequency signal sent from a base station to the modem unit and delivers a signal transmitted from the modem unit to the base station. The repeater modem unit monitors and multiplexes a shadow area detection signal. The second radio frequency processor transmits a radio frequency signal sent from a subscriber unit to the modem unit and delivers a signal transmitted from the modem unit to the subscriber unit.

4. However, D relates to a method capable of detecting a shadow area in a radio communication system which is provided with a multimedia signal having the function of detecting a shadow area in a cell area. D does not disclose the characteristic of the present invention wherein interference between signals having the same frequency is eliminated and a wireless internet service can easily be provided, even in the shadow area, by a signal, and data sending/receiving can be completed using a different communication method.

5. It is thus believed that Claims 1-17 meet the criteria set out in PCT Article 33(2)-(4). D does not teach nor fairly suggest any of the components which are especially set forth in the claims. Therefore, Claims 1-17 have novelty, an inventive step and industrial applicability.